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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/071,786	02/07/2002	Carroll Diaz	A01280US	3588

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EXAMINER

FLANDRO, RYAN M

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/071,786

Applicant(s)

DIAZ, CARROLL

Examiner

Ryan M Flandro

Art Unit

3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. In view of Applicant's arguments¹ with respect to the specification, the Examiner's objection set forth in the previous Office action² is hereby withdrawn.

Claim Rejections - 35 USC § 112

2. Likewise, in view of Applicant's arguments with regard to the enablement requirement under 35 USC § 112, first paragraph, the Examiner hereby withdraws the rejection.

Claim Objections

3. Claim 2 is objected to because of the following informalities: in line 2, the recitation "a nut that is connectable to the body at the partially threaded portion" should be removed since it appears to have been included by mistake. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

¹ See pages 7-8 of Applicant's Response submitted 05 August 2004.

² See pages 2-3 of First Non-Final Office action mailed 7/13/04.

Art Unit: 3679

5. Claim 1, 3-5 and 7-10 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Francesco (US 2,597,857).

a. Claim 1. Francesco clearly shows (see figures 1-5 and especially figure 6) and discloses (columns 1-4) an elongated body **41** having an outer surface with an at least partially threaded portion **42**, first and second end portions and a central longitudinal bore that is partially threaded, the first end portion of the body **41** having a socket and a plurality of circumferentially spaced apart, radially extending slots **14** that communicate with the socket; a shaft **46** that extends through the bore and having respective first and second end portions communicating with the body end portions, the shaft **46** being partially externally threaded and rotatable relative to the body **41**; a plurality of locking members **24** that each vary in thickness (when viewed in at least one direction), the locking members **24** are attached to the first end portion of the shaft **46**; the locking members **24** being movable between extended and retracted positions responsive to a rotation of the shaft **46**, the locking members **24** extending radially beyond the outer surface of the body **41** and the selected diameter in the extended position (figure 3) and being contained within the body **41** at the socket and inside the selected diameter in the retracted position (see figure 4); and a nut **56** that is connectable to the body **41** at the partially threaded portion.

b. Claim 3. Francesco, as applied above, includes each limitation recited in claim 3 including that the locking members **24** have curved outer surfaces (cylindrical) (see figures 1-6).

- c. Claim 4. Francesco, as applied above, includes each limitation recited in claim 4 including that the body **41** has curved camming surfaces (cylindrical, see figures 3 and 4) at the socket that are positioned to guide movement of the locking members **24** as they travel between the extended and retracted positions (see figures 1-6).
- d. Claim 5. Francesco, as applied above, includes each limitation recited in claim 5 including a plate (top surface of the shaft **12** or **46**) attached to the shaft **46**, the locking members **24** being mounted on the plate (see figures 1-6).
- e. Claim 7. Francesco, as applied above, includes each limitation recited in claim 7 including the shaft **46** having a tool receptive portion **34** at one end thereof that enables rotation of the shaft **46** relative to the body **41** (see figures 1, 2 and 6; column 2 lines 40-55).
- f. Claim 8. Francesco further shows the nut **56** engages the body **41** generally opposite the locking members **24** (see figure 6).
- g. Claim 9. Francesco further shows and discloses the shaft **46** moves linearly relative to the central longitudinal axis of the body **41** when the shaft **46** is rotated (see figures 1-6).
- h. Claim 10. Francesco clearly shows (see figures 1-5 and especially figure 6) and discloses (columns 1-4) a fastener for joining two members **64** together, each member **64** having an opening **62** therethrough of a selected diameter, comprising an elongated body **41** having an outer surface with an at least partially threaded portion **42**, first and second end portions and a central longitudinal bore that is partially threaded, the first end portion of the body **41** having a socket and a plurality of circumferentially spaced apart, radially

extending slots **14** that communicate with the socket; a shaft **46** that extends through the bore and having respective first and second end portions communicating with the body end portions, the shaft **46** being partially externally threaded and rotatable relative to the body **41**, the partially externally threaded portion of the shaft **46** engaging the threaded portion of the bore; a plurality of locking members **24** that are attached to the shaft **46** at the first end portion of the body **41**, the locking members **24** being attached to a plate (top surface of **12** or **46**) mounted to the first end portion of the shaft **41**; the locking members **24** being movable between extended and retracted positions responsive to a rotation of the shaft **46**, the locking members **24** extending radially beyond the outer surface of the body **41** and the selected diameter in the extended position (figure 3) and being contained within the body **41** at the socket and inside the selected diameter in the retracted position (see figure 4).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Francesco, as applied to claims 1 and 5 above.

a. Claim 2. Francesco shows and discloses two locking members **24**, but lacks explicit disclosure that there are at least three locking members. It has been held, however, that duplicating the components of a prior art device is obvious within the skill of the art. In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include more than two locking members so as to provide, for example, greater circumferential stability to the fastener via three or more locking members.

b. Claim 6. Francesco shows and discloses a shaft threaded portion that engages the body **41**, but lacks disclosure that the shaft **46** has a first threaded portion that connects with the plate and a second threaded portion that engages the body **41**. Effectively then, Francesco lacks disclosure that the plate (top surface of the shaft **46**) holding the locking members **24** is separable from the shaft **46**. Nevertheless, one-piece construction, in place of separate elements fastened together, has been held obvious within the skill of the art. In re Kohno, 391 F.2d 959, 157 USPQ 275 (CCPA 1968); In re Larson, 340 F.2d 965, 144 USPQ 347 (CCPA 1965). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the portion of the shaft carrying the locking members (a plate) separable therefrom and connectable via a threaded portion in order to aid in assembly or disassembly of the fastener in general.

Response to Arguments

8. Applicant's arguments in the response submitted 05 August 2004 are substantially addressed above and have been found persuasive.

Conclusion

9. This action is NON-FINAL.
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan M Flandro whose telephone number is (703) 305-6952. The examiner can normally be reached on 9:00am- 6:00pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


RMF

October 23, 2004



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